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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/051,602	01/17/2002	William A. Baker	5893.02	1121

20686 7590 04/14/2006

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DENVER, CO 80202-5647

EXAMINER	
NGUYEN, TAM M	

ART UNIT	PAPER NUMBER
3764	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/051,602	BAKER, WILLIAM A.	
	Examiner	Art Unit	
	Tam Nguyen	3764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19 and 24-32* is/are rejected.

7)☒ Claim(s) *20-23* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

JEROME DONNELLY
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/18/06 & 1/20/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg (5,423,728) in view of Pong et al. (5,451,071).

2. As to claim 1, Goldberg discloses a frame comprising an upper front end (4), a lower front end (A), a rear end (B) and a set of forks (13) wherein the upper front end is attached to the forks and the lower front end is in a fixed position relative to the forks (see Fig. 2A below). Goldberg does not disclose that the frame is of a monoframe/monocoque construction. Pong et al. disclose an exercise bicycle having a frame of monocoque construction generally defined by two panels (72,74) rigidly attached together (see Figs. 1 & 11, ABSTRACT, Col. 1, line 1-Col. 2, line 48 and Col. 4, lines 38-58). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Goldberg's frame from semi-monocoque components since monocoque frames are considered to be relatively lighter than traditional tube frames and the frames are modular in construction to facilitate production and knockdown for ease of transport and repair.

3. As to claims 2, 3, 8 and 9, Goldberg and Pong et al. disclose a modified frame as described above (see discussion of claim 1). Goldberg further discloses that the upper

front end is attached to the forks and the lower front end is in a fixed position relative to the forks as substantially claimed. The monoframe's lower front end and the fork's bottom end are attached to a first plate (C), the first plate is supported on a front base (D) and a rear portion of the monoframe is attached to a second plate (E) that is supported on a rear base (F). Additionally, the monoframe has a shape defined by a central body and a first extension therefrom defined by said monoframe and a top tube (G) (see Fig. 2).

4. As to claims 4 and 7, Goldberg and Pong et al. disclose a modified frame as described above (see discussion of claim 1). Goldberg does not disclose that the frame is a substantially hollow body defined by two panels rigidly attached together to define a space there between. Pong et al. disclose a bicycle frame composed of two panels rigidly attached to define a space there between (see Fig. 11 & Col. 4, lines 38-58). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Goldberg's frame from two panels since such a construction may allow for lighter materials to be used for ease of manufacturing, repair and transport of the frame.

5. As to claims 5 and 6, Goldberg and Pong et al. disclose a modified frame as described above (see discussion of claim 4). Pong et al. disclose that the frame panels can be made from stamped sheet metals which would broadly encompass stamped steel that are held together by adhesive bonding, mechanical connections or seam welding (see Col. 2, lines 3-10, Col. 3, lines 67-Col. 4, line 2 & Col. 3, lines 55-58).

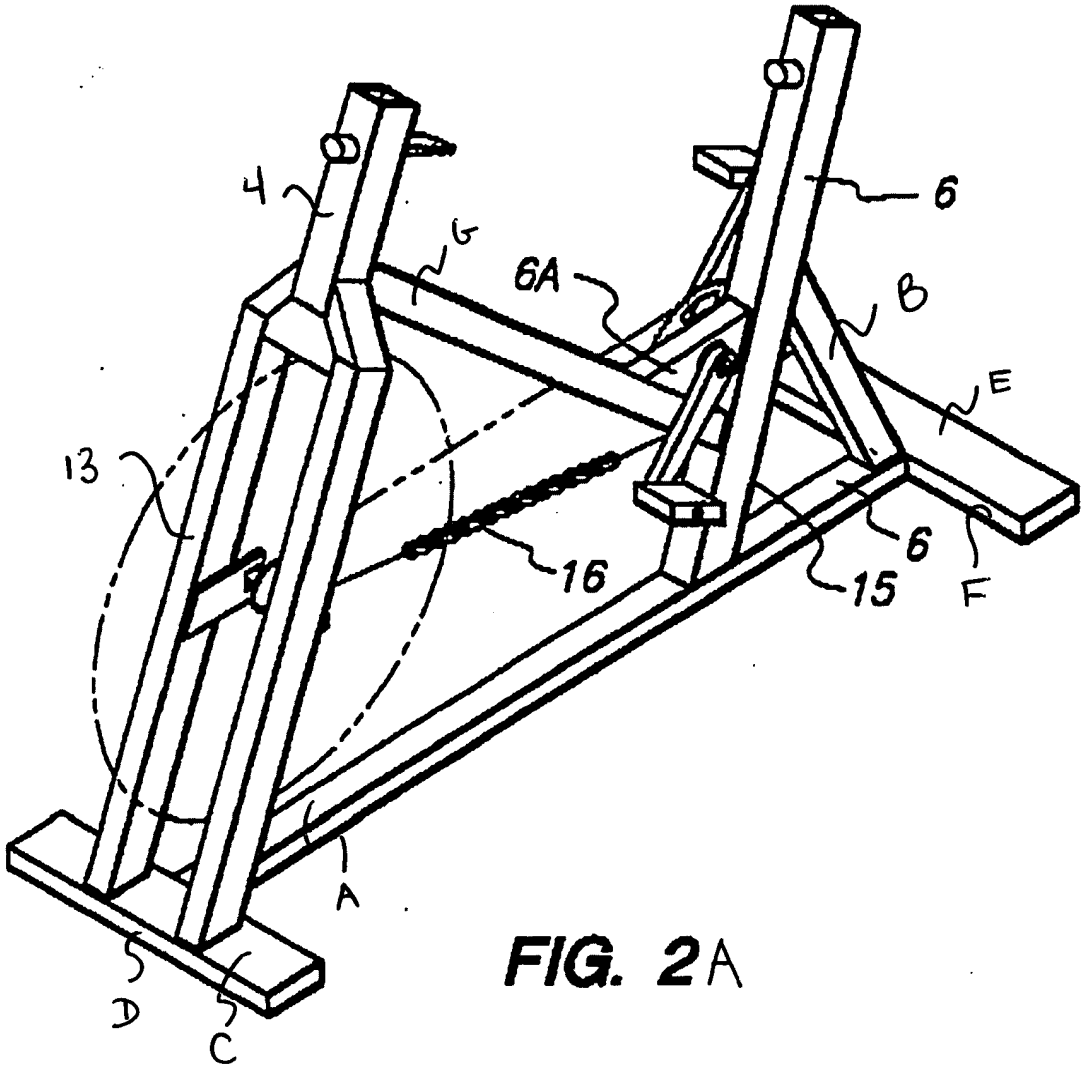


FIG. 2A

Claims 10, 11, 16, 17 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forcillo (6,669,603) in view of Pong et al. (5,451,071) and in further view of Huang (5,351,980).

6. As to claim 10, Forcillo discloses an exercise bicycle frame comprising a frame member having a rear support (A'), a top support (B'), a seat support (22) and a seat tube (28) partially received within the seat support (see Fig. 1B below). Forcillo does not disclose that the frame is of a monocoque construction. Pong et al. disclose an

exercise bicycle having a frame of monocoque construction (see Fig. 11 & Col. 4, lines 38-58). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Forcillo's frame from semimonocoque components since a monocoque frame is generally considered to be relatively lighter than a traditional tube frame and the Monocoque frame is modular in construction to facilitate production and knockdown for ease of transport and repair. Forcillo does not disclose a bottom tube connected to the seat tube at a connection point wherein the frame member encloses the connection point. Huang discloses a bicycle frame having a seat support and adjustment means that include a seat tube (30) at least partially received within a seat support (11, C') and a bottom tube (20) connected to the seat tube at a connection point (D') wherein the frame member encloses the connection point (see Figs. 1C & 2C below). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to substitute Forcillo's seat support and adjustment means (28,146) with Huang's seat support and adjustment means since they are functionally equivalent in providing a stable support and quick height adjustments to the seat.

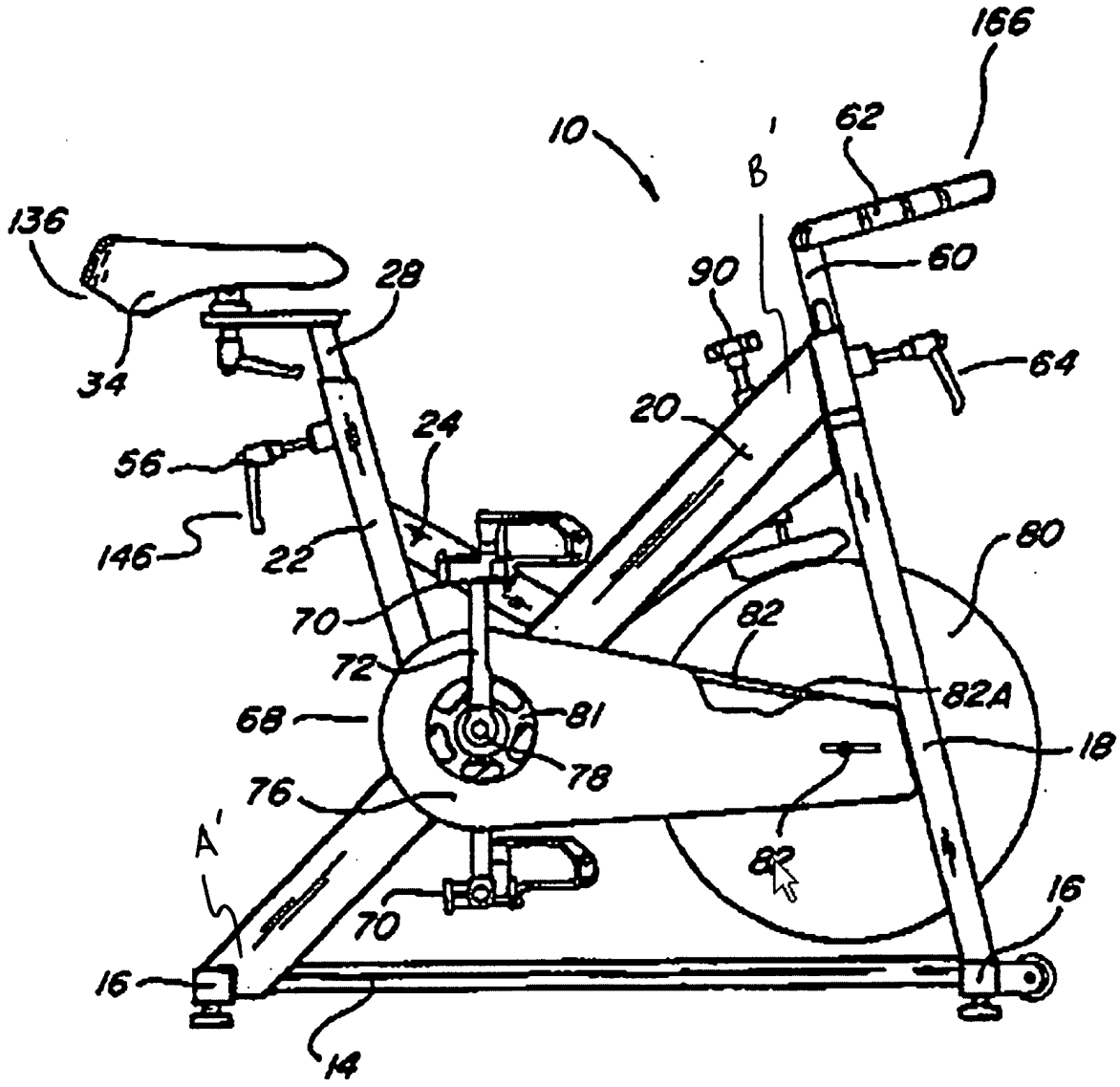
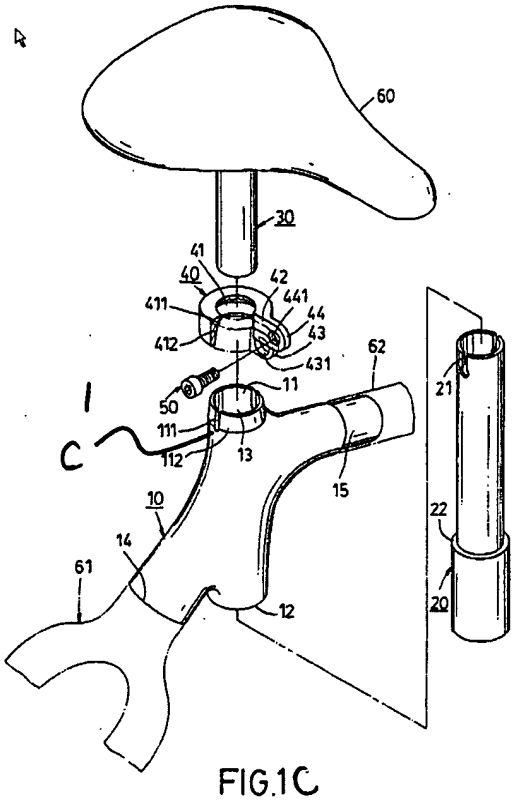

166
10
B'
62
136
60
90
28
34
64
20
24
56
146
22
80
70
82
72
82A
68
81
18
78
76
A'
82
16
70
16
14

Fig. 1B


60
30
41
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42
441
411
44
412
43
431
62
11
21
50
C'
111
112
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61
12
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FIG.1C

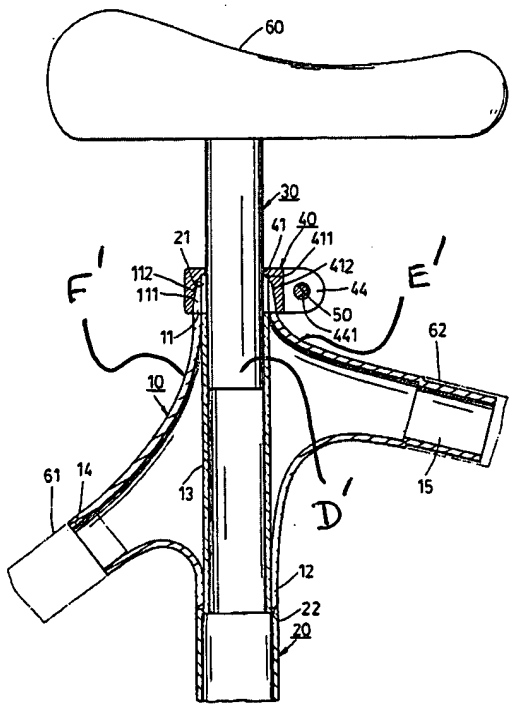
60
30
41
40
411
21
F'
112
111
412
44
E'
50
441
62
11
10
61
14
13
D'
15
12
22
20

FIG.2C

7. As to claim 11, Forcillo, Pong et al. and Huang disclose a modified frame as described above (see discussion of claim 10). Forcillo does not disclose that the frame is a hollow body defined by two panels rigidly attached together to define a space there between. Pong et al. discloses a frame comprised of two panels rigidly attached to define a space there between (see Fig. 11). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Forcillo's frame from two panels to simplify the manufacturing process, and such a construction may allow for lighter materials to be used for ease of transport and storage.

8. As to claims 16 and 17, Forcillo, Pong et al. and Huang disclose a modified frame as described above (see discussion of claim 11). Forcillo further discloses a bottom support (14) extending forward from a rear support and a front fork assembly (18) that is connected with the bottom support (14) and a top support (B') (see Fig. 1B above).

9. As to claims 24-27, Forcillo, Pong et al. and Huang disclose a modified frame as described above (see discussion of claim 11). Forcillo discloses a seat support (22) but he does not disclose that the seat support defines a rear concave wall and a front concave wall as substantially claimed (see Fig. 1B). Huang discloses a seat support (11, C') that defines a front concave wall (E') and a rear concave wall (F') as substantially claimed (see Fig. 2C). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Forcillo's seat support (near it's lower end) define a rear concave wall and a front concave wall to provide a reinforced area for the frame to receive the seat tube. Furthermore, a change in the shape of a

prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ (CCPA 1966).

Claims 12, 13, 18, 19 and 28-32 rejected under 35 U.S.C. 103(a) as being unpatentable over Forcillo (6,669,603), Pong et al. (5,451,071), Huang (5,351,980) and in further view of Harris (6,413,191).

10. As to claim 28, Forcillo, Pong et al. and Huang disclose a modified frame as described above (see discussion of claim 24). Forcillo and Huang disclose that the rear concave wall of the seat support intersects the rear support, but Forcillo does not disclose that the rear support has an upper convex wall. Harris discloses a bicycle frame having a rear support with an upper convex wall (A''') (see Fig. 2D below). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Forcillo's rear support into a shape that would include a upper convex wall since Forcillo's rear support and Harris' rear support are functionally equivalent in providing a rigid support structure. Furthermore, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ (CCPA 1966).

11. As to claims 29 and 30, Forcillo, Pong et al., Huang and Harris disclose a modified frame as described above (see discussion of claim 28). Forcillo further discloses that the frame panels each include an aperture for receiving a bottom bracket (78) that is connected with the seat tube wherein the bracket is configured to support a drive train (see Fig. 1B above).

12. As to claims 12, 13, 18, 19, 31 and 32, Forcillo, Pong et al. and Huang disclose a modified frame as described above (see discussion of claims 10 and 16). Forcillo does not disclose that the rear, top and bottom supports define an upper convex wall and a lower convex wall such that the lower concave surface of the top support intersects the top concave surface of the bottom support. Harris et al. disclose an exercise device having a frame that includes an upper convex wall (B''') and a lower concave wall (C''') (see Fig. 2D below). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to make Forcillo's rear, top and bottom supports to have concave and convex characteristics since those characteristics are known in the exercise art and Forcillo and Harris' shaped components are functionally equivalent in providing a rigid support. Furthermore, a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ (CCPA 1966).

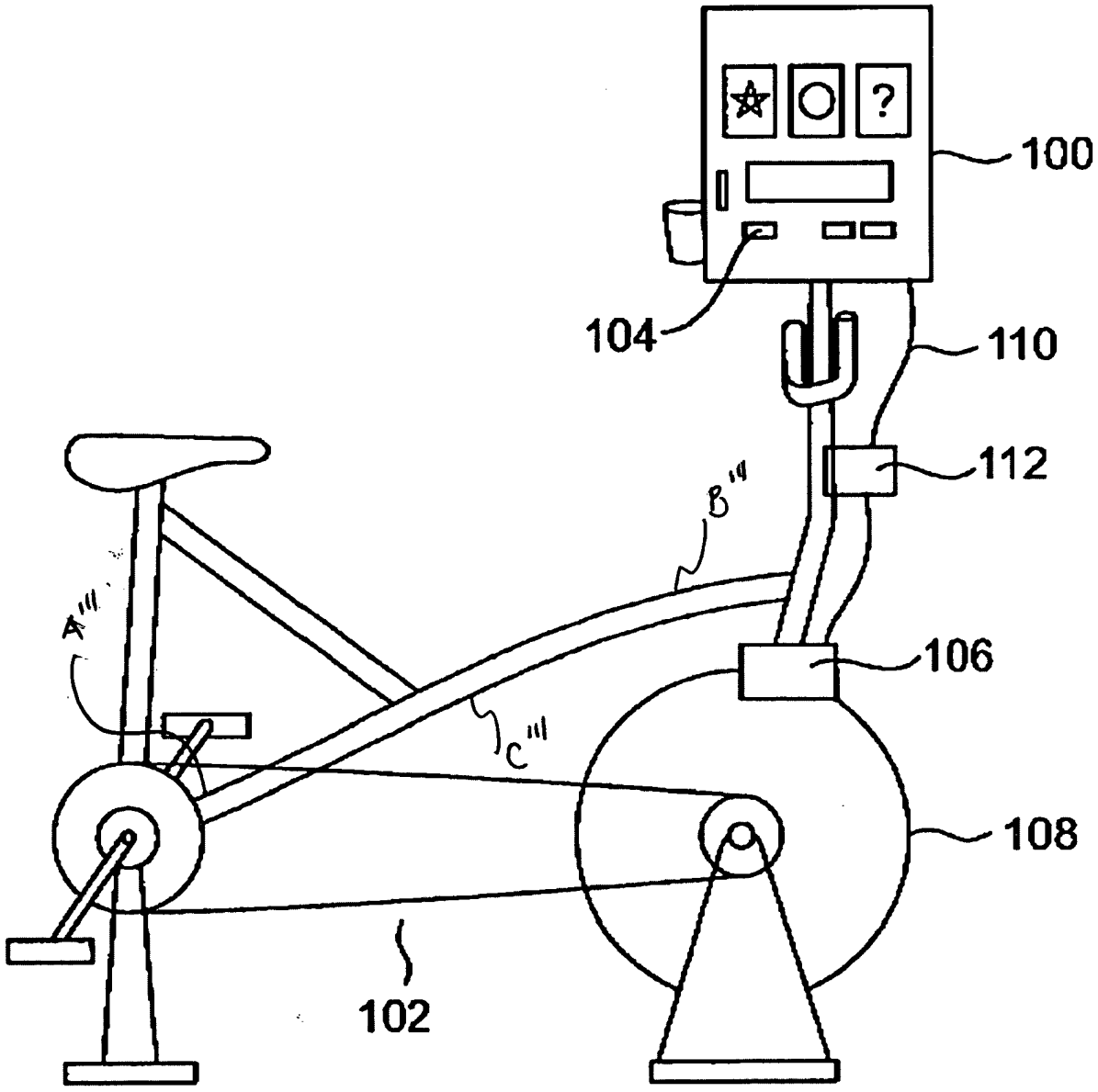

FIG. 2D

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Forcillo (6,669,603) in view of Pong et al. (5,451,071), Huang (5,351,980), Harris (6,413,191) and in further view of Lull et al. (D474,252).

13. As to claims 14 and 15, Forcillo, Pong et al., Huang and Harris disclose a modified frame as described above (see discussion of claim 13). Forcillo does not disclose a frame that includes a rear plate as substantially claimed. Lull et al. disclose an exercise device having a frame that includes a rear plate (A"") extending transversely from the rear support to laterally support the frame wherein the plate is attached to both the lower concave wall and the upper convex wall (see Fig. 1E below). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to add such a plate to Forcillo's frame to provide a more stable connection between the frame and transverse foot supports.

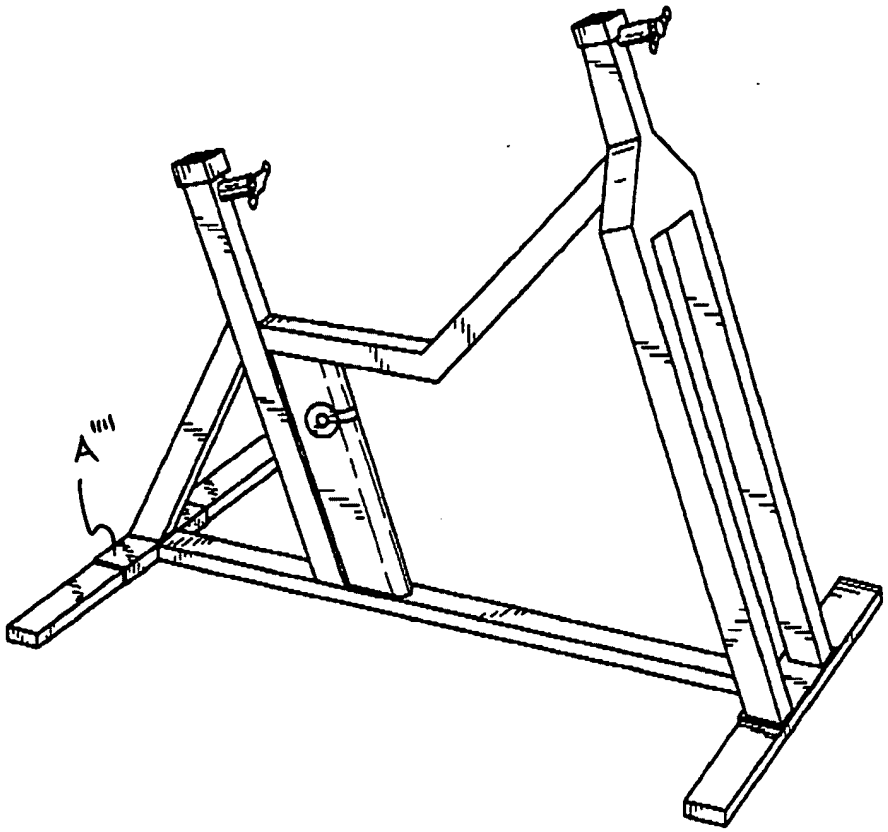

FIG. 1E

Response to Arguments

14. Applicant's arguments with respect to claims 1-19 and 24-32 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

15. Claims 20-23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bowden '916 and Toplis '731 each disclose bicycle frames of monocoque construction.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam Nguyen whose telephone number is 571-272-4979. The examiner can normally be reached on M-F 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Huson can be reached on 571-272-4778. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 12, 2006
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JEROME DONNELLY
PRIMARY EXAMINER